

Application No.: 10/249,352
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 Group Art Unit: 3742
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Amendments to the Specification

Please amend the Summary of the Invention as follows:

The invention addresses the shortcomings of prior art cup holders and relates to a thermal conditioning beverage container holder for holding different sizes and shapes of all types of beverage containers while controlling the temperature of the beverage in the beverage container.

The beverage container holder of according to the invention comprises a housing defining a chamber sized to receive at least one a-beverage container and having an access opening permitting access to the chamber through the housing. A convection airflow generator is fluidly coupled to the chamber and configured to deliver and delivers thermally conditioned air to the chamber to control the temperature of the beverage within a beverage container placed in the chamber. The beverage container holder includes a size-adjustable structure to enable the supporting of cups of differing sizes. Also, a beverage container support is configured to support beverage containers having different vertical heights and different cross-sectional area sizes.

The thermal conditioning beverage container holder can further include a movable cover for selectively closing the access opening. The movable cover preferably comprises multiple segments that telescopically nest when opened.

The size-adjustable structure can comprise a resizing element used to resize the container holder to accommodate containers of differing diameter and/or height. One such resizing element is a beverage container support can include first and second recesses located within the chamber, and sized to support a bottom portion of the beverage container, with a where the first recess is configured to receiveing the bottom of the beverage container up to having a first maximum diameter cross-sectional area and the. A second recess is configured to receive, greater in size than the first recess, can be provided for receiving the bottom of a beverage container of having a second maximum diameter cross-sectional area that is larger in size than the first maximum diameter cross-sectional area.

The beverage container support can include The resizing element can also comprise a plate in which is formed an having at least one opening for receiving a beverage container and which is movable between a first position, where the plate overlies a lower portion of the chamber to and reduces the effective cross-sectional area of the chamber, and a second position,

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where the plate is withdrawn from the overlying position relative relationship to the lower portion of the chamber. The plate is preferably spaced above the beverage container support when the plate is in the first position. In this way, the beverage holder is configured to hold a beverage container of small cross-sectional area in the first position than in the second position.

The convection airflow generator comprises a thermal conditioner for conditioning the temperature of the air in the chamber by introducing conditioned air into the chamber by convection. The thermal conditioner includes a blower introducing conditioned air through the chamber. The thermal conditioner can be a thermoelectric device in combination with a fan.

In another embodiment, the invention relates to a resealable cup holder comprising a housing defining a cup receiving chamber having an access opening through which a cup can be inserted or removed. A cup holder is located within the chamber for supporting a cup placed within the chamber. A see through cover is movably mounted to the housing for movement between a closed position, where the cover closes the access opening, and an opened position, where the cover is removed from the access opening. The movable cover preferably comprises multiple segments that telescopically nest when opened.

In yet another embodiment, the invention relates to a method for controlling the temperature of a beverage held by a beverage container temporarily stored in a size adjustable beverage holder located within a chamber of a housing in a motor vehicle. The method comprises adjusting the size of the size adjustable beverage holder to accommodate the beverage container to be placed in the chamber; placing the beverage container in the size adjustable beverage holder; and introducing thermally conditioned air into the chamber to control the temperature of the beverage in the beverage container at a temperature above or below the ambient air temperature within the vehicle interior.

In one aspect, the beverage container support is part of the housing and forms the bottom of the chamber. The housing further comprises a peripheral sidewall extending upwardly from the container support and terminating in an upper lip that defines a chamber opening. The peripheral sidewall comprises an inlet fluidly coupled to the convection airflow generator through which conditioned air is delivered into the chamber.

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The thermal conditioning beverage container holder can include a storage chamber and a storage chamber cover for selectively covering the storage chamber. As well, the thermal conditioning beverage container holder can include multiple segments movably mounted to the housing for selectively closing the access opening. In another aspect, the thermal conditioning beverage container holder is configured to be mounted in a motor vehicle between the front driver and passenger seats.

In a further aspect, a thermal conditioning beverage container holder according to the invention comprises a housing defining an open chamber sized to receive a beverage container and having an access opening permitting access to the chamber. A convection airflow generator is fluidly coupled to the chamber and configured to deliver thermally conditioned air to the chamber. A plate has at least one opening for receiving a beverage container and is movable between a first position, where the plate overlies the chamber and reduces the effective cross-sectional area of the chamber, and a second position, where the plate is withdrawn from overlying relationship to the chamber such that the beverage holder is configured to hold a smaller circumference beverage container in the first position than in the second position. A beverage container support is located within the chamber and configured to provide bottom support for beverage containers having different bottom circumferences. Preferably, the plate is removably mounted within the chamber for reducing the size of the beverage container that can be received within the chamber when the plate is mounted within the chamber. Also, preferably, the plate is spaced above the container support when the plate is in the first position.

The beverage container support can include first and second recesses located within the chamber, where the first recess is configured to receive the bottom of a beverage container having a first maximum cross-sectional area and the second recess is configured to receive the bottom of a beverage container having a second maximum cross-sectional area that is larger than the first maximum cross-sectional area. In one embodiment, the housing defines a console for a motor vehicle and is sized to fit between the front seats. The thermal conditioning beverage container holder can further include a storage chamber and a storage chamber cover for selectively covering the storage chamber.

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In yet a further aspect of the invention, a thermal conditioning beverage container holder comprises a housing defining a chamber sized to receive at least one beverage container and having an access opening permitting access to the chamber. A convection airflow generator is fluidly coupled to the chamber and configured to deliver thermally conditioned air to the chamber. A resizing element is provided so that the thermal conditioning beverage container holder can support and accommodate beverage containers having different vertical heights and different cross-sectional area sizes.

In one embodiment, the resizing element comprises first and second recesses located within the chamber. The first recess is configured to receive the bottom of a beverage container having a first maximum cross-sectional area and the second recess is configured to receive the bottom of a beverage container having a second maximum cross-sectional area that is larger than the first maximum cross-sectional area. The first and second recesses can be nested.

The resizing element can include a recess configured to receive the bottom of a beverage container having a cross-sectional area that is smaller than the cross-sectional area of the bottom of a different beverage container that otherwise can be supported by the thermal conditioning beverage container holder. Also, the resizing element can include a plate having at least one opening for receiving a beverage container and which is movable between a first position, where the plate overlies a lower portion of the chamber and reduces the effective cross-sectional area of the chamber, and a second position, where the plate is withdrawn from overlying relationship to the lower portion of the chamber such that the beverage holder is configured to hold a beverage container of smaller cross-sectional area in the first position than in the second position.